

ACCESSION NR: APL019827

anomalies indicated. The first segment, in which the electrical properties have normal dependence on state, corresponds to the Fermi level in subzone 1, when carriers of but a single kind participate in current transfer. The second segment corresponds to a position of the Fermi level when high-mobility holes are accompanied by low-mobility holes from subzone 2, which has a high density state. A change in Te content in this region is accompanied by a change in concentrations of high-mobility and low-mobility holes, and this is manifested in the anomalous dependence of electrical properties on state. Quantitative determinations of the basic parameters of the subzone appear reasonable. Orig. art. has: 6 figures and 6 formulas.

ASSOCIATION: Institut poluprovodnikov AN SSSR, Leningrad (Institute of Semiconductors AN SSSR)

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NO REF SOV: 001

OTHER: 003

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ENCLOSURE: 01

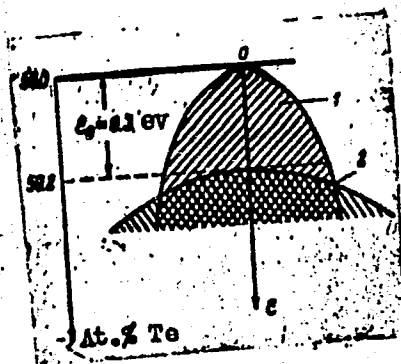


Fig. 1. Diagrammatic sketch of the valence band in germanium telluride.

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L 2203-66 ENT(1)/ENT(m)/ETC/ENG(m)/T/EMP(t)/ENP(b)/ENA(h) LIP(c) RIM/JD/AT
 ACCESSION NR: AP5017328 UR/0181/65/007/007/2223/2226

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V. ⁵³ ⁵⁴ ⁵⁵ ⁵⁶ ⁵⁷ ⁵⁸ ⁵⁹ ⁶⁰ ⁶¹ ⁶² ⁶³ ⁶⁴ ⁶⁵ ⁶⁶ ⁶⁷ ⁶⁸ ⁶⁹ ⁷⁰ ⁷¹ ⁷² ⁷³ ⁷⁴ ⁷⁵ ⁷⁶ ⁷⁷ ⁷⁸ ⁷⁹ ⁸⁰ ⁸¹ ⁸² ⁸³ ⁸⁴ ⁸⁵ ⁸⁶ ⁸⁷ ⁸⁸ ⁸⁹ ⁹⁰ ⁹¹ ⁹² ⁹³ ⁹⁴ ⁹⁵ ⁹⁶ ⁹⁷ ⁹⁸ ⁹⁹ ¹⁰⁰ ¹⁰¹ ¹⁰² ¹⁰³ ¹⁰⁴ ¹⁰⁵ ¹⁰⁶ ¹⁰⁷ ¹⁰⁸ ¹⁰⁹ ¹¹⁰ ¹¹¹ ¹¹² ¹¹³ ¹¹⁴ ¹¹⁵ ¹¹⁶ ¹¹⁷ ¹¹⁸ ¹¹⁹ ¹²⁰ ¹²¹ ¹²² ¹²³ ¹²⁴ ¹²⁵ ¹²⁶ ¹²⁷ ¹²⁸ ¹²⁹ ¹³⁰ ¹³¹ ¹³² ¹³³ ¹³⁴ ¹³⁵ ¹³⁶ ¹³⁷ ¹³⁸ ¹³⁹ ¹⁴⁰ ¹⁴¹ ¹⁴² ¹⁴³ ¹⁴⁴ ¹⁴⁵ ¹⁴⁶ ¹⁴⁷ ¹⁴⁸ ¹⁴⁹ ¹⁵⁰ ¹⁵¹ ¹⁵² ¹⁵³ ¹⁵⁴ ¹⁵⁵ ¹⁵⁶ ¹⁵⁷ ¹⁵⁸ ¹⁵⁹ ¹⁶⁰ ¹⁶¹ ¹⁶² ¹⁶³ ¹⁶⁴ ¹⁶⁵ ¹⁶⁶ ¹⁶⁷ ¹⁶⁸ ¹⁶⁹ ¹⁷⁰ ¹⁷¹ ¹⁷² ¹⁷³ ¹⁷⁴ ¹⁷⁵ ¹⁷⁶ ¹⁷⁷ ¹⁷⁸ ¹⁷⁹ ¹⁸⁰ ¹⁸¹ ¹⁸² ¹⁸³ ¹⁸⁴ ¹⁸⁵ ¹⁸⁶ ¹⁸⁷ ¹⁸⁸ ¹⁸⁹ ¹⁹⁰ ¹⁹¹ ¹⁹² ¹⁹³ ¹⁹⁴ ¹⁹⁵ ¹⁹⁶ ¹⁹⁷ ¹⁹⁸ ¹⁹⁹ ²⁰⁰ ²⁰¹ ²⁰² ²⁰³ ²⁰⁴ ²⁰⁵ ²⁰⁶ ²⁰⁷ ²⁰⁸ ²⁰⁹ ²¹⁰ ²¹¹ ²¹² ²¹³ ²¹⁴ ²¹⁵ ²¹⁶ ²¹⁷ ²¹⁸ ²¹⁹ ²²⁰ ²²¹ ²²² ²²³ ²²⁴ ²²⁵ ²²⁶ ²²⁷ ²²⁸ ²²⁹ ²³⁰ ²³¹ ²³² ²³³ ²³⁴ ²³⁵ ²³⁶ ²³⁷ ²³⁸ ²³⁹ ²⁴⁰ ²⁴¹ ²⁴² ²⁴³ ²⁴⁴ ²⁴⁵ ²⁴⁶ ²⁴⁷ ²⁴⁸ ²⁴⁹ ²⁵⁰ ²⁵¹ ²⁵² ²⁵³ ²⁵⁴ ²⁵⁵ ²⁵⁶ ²⁵⁷ ²⁵⁸ ²⁵⁹ ²⁶⁰ ²⁶¹ ²⁶² ²⁶³ ²⁶⁴ ²⁶⁵ ²⁶⁶ ²⁶⁷ ²⁶⁸ ²⁶⁹ ²⁷⁰ ²⁷¹ ²⁷² ²⁷³ ²⁷⁴ ²⁷⁵ ²⁷⁶ ²⁷⁷ ²⁷⁸ ²⁷⁹ ²⁸⁰ ²⁸¹ ²⁸² ²⁸³ ²⁸⁴ ²⁸⁵ ²⁸⁶ ²⁸⁷ ²⁸⁸ ²⁸⁹ ²⁹⁰ ²⁹¹ ²⁹² ²⁹³ ²⁹⁴ ²⁹⁵ ²⁹⁶ ²⁹⁷ ²⁹⁸ ²⁹⁹ ³⁰⁰ ³⁰¹ ³⁰² ³⁰³ ³⁰⁴ ³⁰⁵ ³⁰⁶ ³⁰⁷ ³⁰⁸ ³⁰⁹ ³¹⁰ ³¹¹ ³¹² ³¹³ 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ACCESSION NR: AP5017328

high temperatures while the electric and thermal conductivity increase indicates that carriers of opposite sign appear. The use of samples with lower carrier density has made it possible to determine more accurately the width of the forbidden band, namely 0.27 ± 0.03 eV at absolute zero, for four concentrations in the interval 1.8 to $6.3 \times 10^{20} \text{ cm}^{-3}$. Orig. art. has: 2 figures and 2 formulas.

ASSOCIATION: Institut poluprovodnikov AN SSSR, Leningrad (Institute of Semiconductors, AN SSSR)

SUBMITTED: 01Dec64

NR REF SOV: 002

ENCL: 00

OTHER: 004

SUB CODE: SS

Card 2/2 DP

L 29296-66 EWT(1)/EWT(m)/ETC(f)/T/EMP(t)/ETI IJP(c) JD/AT

ACC NR: AP6012452

SOURCE CODE: UR/0181/66/008/004/0997/1003

AUTHOR: Kolomoys, N. V.

ORG: Institute of Semiconductors AN SSSR, Leningrad (Institut poluprovodnikov AN SSSR)

TITLE: Effect of interband transitions on the thermoelectric properties of a substance

SOURCE: Fizika tverdogo tela, v. 8, no. 4, 1966, 997-1003

TOPIC TAGS: thermoelectric property, electron transition, thermal emf, electric conductivity, thermal conduction, transition element, energy band structure

ABSTRACT: To determine the influence of interband scattering on the thermal emf, the electric conductivity, and electronic thermal conductivity, the author derives formulas for these quantities for a model of overlapping bands with strongly differing state density. It is assumed that the states have a parabolic dependence on the energy. The formulas thus obtained differ from those obtained for pure metals, where strong degeneracy of the electron gas in both overlapping bands is assumed. Such an assumption is not valid for alloys. The theoretical results for the thermal emf are compared with the experimental values obtained for

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L 29296-66

ACC NR: AP6012452

nickel and for nickel-copper alloys and are found to be in good agreement. The formulas explain qualitatively the dependence of the thermal emf on the composition in transition-metal alloys without resorting to strong carrier degeneracy in the d-band. The formulas can also be used for quantitative estimates of the thermoelectric properties of semiconductors but only if the conduction in the band with the larger state density can be neglected. Orig. art. has: 4 figures and 16 formulas.

SUB CODE: 20/ SUBM DATE: 27May65/ ORIG REF: 003/ OTH REF: 001

Cord

2/2 BK

L 29973-66 EWT(m)/ETC(f)/EWP(t)/ETI IJP(c) RDW/JD
 ACC NR: AP6012487 SOURCE CODE: UR/0181/66/008/004/1212/1216

AUTHORS: Sysoyeva, L. M.; Lev, Ye. Ya.; Kolomojets, N. V. 60
 B

ORG: Institute of Semiconductors, AN SSSR, Leningrad (Institut poluprovodnikov AN SSSR)

TITLE: Mechanism of carrier scattering in germanium telluride 27

SOURCE: Fizika tverdogo tela, v. 8, no. 4, 1966, 1212-1216

TOPIC TAGS: germanium compound, telluride, carrier scattering, hole mobility, carrier density, crystal defect, temperature dependence

ABSTRACT: Continuing their earlier work on this subject (FTT v. 7, 223, 1965 and v. 6, 706, 1964), the authors discuss the experimentally observed anomalous dependence of the carrier mobility in germanium telluride on the temperature and on the density, and conclude that although the mobilities of the light and heavy holes have the same temperature variation ($\sim T^{-3/2}$), the difference in the effective masses of the two types of holes (by approximately one order of magnitude) gives rise to different temperature dependences of the mobilities and differences in the dependence of the mobility on the true carrier density. The anomalies are caused by the facts that at different densities the relative

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L 29973-66

APPROVED FOR RELEASE: 09/18/2001 CIA-RDP86-00513R000823920011-5

ACC NR: AP6012487

shears of the heavy and light holes vary. The comparison of the experimental data with the authors' theory, which allows for two types of holes, is made under the assumption that there is no interband scattering. The observed dependence of the absolute mobility on the concentration of defects in the crystal is related to additional scattering by the screened lattice defects, which does not depend on the temperature. It is concluded as a result that in germanium telluride there are two simultaneously acting scattering mechanisms, by the acoustic lattice vibrations and by the screened defects. The observed anomalies in the behavior of the mobility are due, as in other materials, to the complicated structure of the energy spectrum of the carriers. Orig. art. has: 2 figures and 3 formulas.

SUB CODE: 20/ SUBM DATE: 24May65/ ORIG REF: 006/ OTH REF: 003

Card

2/2-10

L 39631-66 ZAT 11 AI/UR/CD-2

ACC NR: AP6002878

SOURCE CODE: UR/0286/65/000/024/0038/0038

AUTHOR: Yakhats, M.S.; Kolomoyets, N.V.; Vedernikov, M.V. 12
F

ORG: none

TITLE: Solar heat generator,²⁵ Class 24, no. 176967 [announced by the All-Union Scientific Research Institute of Current Sources (Vsesoyuznyy nauchno-issledovatel'skiy institut istochnikov toka)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 38

TOPIC TAGS: *solar energy conversion, generator, solar power plant, thermocouple, commutator, space electronics, capacitor, heat energy conversion*

ABSTRACT: 1. The solar heat ²generator, patented under the author's certificate No. 123378, is characterized by the fact that the thermo-elements are made from Ni-Pd and Pd-Ag alloys and the commutation is effected by means of a threaded connection. The purpose of this is to improve the mechanical strength of the generator and to diminish its shakiness during operation in outer space. 2. The heat generator, described in paragraph 1, is characterized by the fact that the thermo-elements are commutated in series of two in one capacitor with the aid of a split cone for the purpose of increasing the specific capacity.

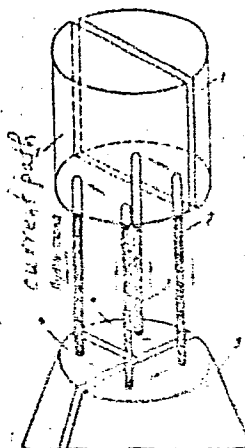
Card 1/2

L 39621-68

ACC NR: AP6002878

3. The heat generator, described in paragraph 1, is characterized by the fact that the surface of the heat receiver is rifled for the purpose of increasing its absorptive power.

1. heat receiver
2. p-branch of the thermoelement
3. n-branch of the thermoelement
4. conical current shunts
5. conical cooler



SUB CODE: 10,13/ SUBM DATE: 30Dec64/

Card 2/2/MLP

L 46929-66 EWT(m)/EWP(w)/T/EWP(t)/ETI IJP(c) JD

ACC NR: AP6015447

(N)

SOURCE CODE: UR/0181/66/008/005/1336/1340

AUTHOR: Ayrapetyants, S. V.; Vinogradova, M. N.; Dubrovskaya, I. N.; Kolomojets, N. V.; Rudnik, I. M.

ORG: Institute of Semiconductors, AN SSSR, Leningrad (Institut poluprovodnikov AN SSSR)

TITLE: Structure of the valence band of highly alloyed lead telluride

SOURCE: Fizika tverdogo tela, v. 8, no. 5, 1966, 1336-1340

TOPIC TAGS: valence band, telluride, thermal emf, carrier density

ABSTRACT: An attempt is made to determine quantitatively the parameters of the valence band by studying the electrical properties of highly alloyed lead telluride. The electrical properties of p-type lead telluride, having carrier concentrations of $2 \cdot 10^{18}$ to $1.4 \cdot 10^{20} \text{ cm}^{-3}$ (according to the Hall effect), are studied. The energy gap between the two valence zones is calculated, and the effective mass of heavy holes is determined. The temperature dependence of the thermal emf is used to determine the variation in the gap as a function of temperature. As temperature increases, the gap decreases ($\Delta E = \Delta E_0 - \alpha$), where $\alpha = 2 \cdot 10^{-4} \text{ eV/deg}$. Results, which are considered as interim, show that the valence zone structures of highly alloyed tellurides of lead, germanium, and apparently tin as well, are similar. Comparison with the results of

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L 46929-66

ACC NR: AP6015447

"APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000823920011-5

other authors show a discrepancy for ΔE and m_T^* . The authors thank B. Ya. Mozhnev for participation in the work and Ye. K. Kamornik and A. G. Orlov for conducting the spectrum analysis of the sodium content in the samples. Orig. art. has: 4 figures.

SUB CODE: 20/

SUBM DATE: 15Jul65/

ORIG REF: 004/

OTH REF: 006

awm

Card 2/2

ACC NR: AP6033552

SOURCE CODE: UR/0181/66/008/010/2925/2928

AUTHOR: Kolomojets, N. V.; Vinogradova, M. N.; Lev, Ye. Ya.; Sysoyeva, L. M.

ORG: Institute of Semiconductors, AN SSSR, Leningrad (Institut poluprovodnikov AN SSSR)

TITLE: Hall effect in semiconductors with two types of carrier

SOURCE: Fizika tverdogo tela, v. 8, no. 10, 1966, 2925-2928

TOPIC TAGS: Hall effect, semiconductor carrier, carrier density, temperature dependence, semiconductor band structure, *Current carrier*

ABSTRACT: The purpose of the paper is to clarify the influence of the presence of two types of current carrier of the same polarity on the Hall coefficient when account is taken of the variation of the energy gap ΔE with temperature, and to compare the calculated data with the experimental ones for p-type PbTe and for GeTe. The change in the Hall coefficient with decreasing fraction n_2 of the heavier carriers (holes), due to the change in the temperature and simultaneous decrease in the gap ΔE between the sub-bands is calculated for several carrier mobility ratios (5, 10, 20). The calculation shows that the Hall coefficient R_x should go through a maximum at a definite ratio n_2/n_1 , amounting to 0.95 and 0.92 for GeTe and PbTe respectively. R_x increases with increasing temperature (corresponding to an increase in n_2/n_1), in agreement with the experimental data, but at temperatures above 570K for GeTe and 400-450K for PbTe

Card 1/2

ACC NR: AP6033552

its experimental values begin to decrease, although theoretically it should reach a maximum at higher temperatures. The discrepancy is attributed to the appearance of carriers of opposite polarity, to a change in the overall carrier density due to the change in solubility of the doping metal, and to inaccuracies in the determination of the band parameters. Orig. art. has: 2 figures and 5 formulas.

SUB CODE: 20/ SUBM DATE: 15Feb66/ ORIG REF: 005/ OTH REF: 006

Card 2/2

ACC NR: AF6036782

(N)

SOURCE CODE: UR/0363/66/002/011/1925/1929

AUTHOR: Lev, Ye. Ya.; Sysoyeva, L. M. Kolomojets, N. V.

ORG: Institute for Semiconductors AN SSSR (Institut poluprovodnikov AN SSSR)

TITLE: Effect of impurities on the concentration of current carriers and on the thermal resistance of the germanium telluride lattice

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 11, 1966, 1925-1929

TOPIC TAGS: germanium compound, telluride, current carrier, heat resistance, germanium semiconductor

ABSTRACT: The article reports the results of an investigation of density as a function of the composition and concentration of current carriers, and of the effect of additions of certain group I, III, and V elements on the concentration of current carriers and the thermal resistance of germanium telluride. The measurements of density were carried out in water and toluene on monocrystalline samples containing different amounts of excess tellurium, and which had a concentration of current carriers from 2.0×10^{20} to $14.0 \times 10^{20} \text{ cm}^{-3}$. The error in an individual measurement was \pm grams/cm³; to eliminate random errors, measurements were made on a series of samples with the same composition. The experimental results are given in a series

Card 1/2

UDC: 546.289*241:541.12.03

APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000823920011-5

ACC NR: AF6036782

of curves. On the basis of the data, the following conclusions were drawn: 1) based on measurements of the density of samples of known composition, it was found possible to determine directly the number of germanium vacancies and to determine the true concentration of current carriers; 2) it was established that in very dilute solutions the solution of impurities takes place only in the vacancies of the cation lattice; 3) the solubility of impurities in the vacancies is limited, and is always less than the concentration of vacancies; 4) in the presence of free vacancies, there is the possibility of solution of Cu, Sb, and Bi impurities in considerable amounts, by the displacement of germanium in the occupied places in the lattice; 4) the effect of impurities on the thermal resistance of the lattice can be explained from the point of view of the existence of a limited solubility of the impurities in the vacancies, and by the formation of new dissemination centers which subsequently replace the germanium. Orig. art. has: 4 figures.

SUB CODE: 11, 20/ SUBM DATE: 23Nov65/ ORIG REF: 004/ OTH REF: 003

Card 2/2

And the answer is, "No."

1. *Journal of the American Medical Association*, 1997; 278: 1039-1044.

... ryakova, A. V., Geyzorsthen . . .

High temperature chlorination of titanium slag

1. 1984. g. gaidicheskii zhurnal, 1984, 1, 1, 1-10.

titanium tetrachloride, titanium, trichloride, t.d.z

ABSTRACT: The purpose of this work was to study the effect which temperature in the 1000-2000°C interval has on the chlorination of titanium slag, the degree of chlorination of different slag components with respect to the distribution of the rate of production by increasing the degree of chlorination of titanium slag briquets made from the same titanium slag. The chlorination was carried out in a vertical graphite tube furnace shown in Fig. 1 of the Enclosure. Fig. 2 of the Enclosure shows the degree of chlorination of titanium slag with increase in the temperature. The rate of chlorination increases with increase in the rate was found to be 1000-1500°C interval and apparent energy of activation was 100-150 kJ/mole. The chlorination

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... is a complex physico-chemical process, which is characterized by different rates of chlorination at different rates. The rate of chlorination of silicon, aluminum and titanium were studied. It was found that the rate of chlorination of silicon greatly increases the rate of chlorination of silicon, and the chlorination of aluminum and titanium to a lesser extent. It is shown that it is impractical to chlorinate slag at 2000°C. Orig. art. has 11 refs.

Angiprotsvetmet

44/254

ENCL: 02

SUB CODE: IC, ID

003

OTHER: 001

Card 2/4

KOLCMOYTSEV, A.

PA 31/49T74

USSR/Medicine - Hemosporida Jun 48
Medicine - Drugs, Administration and Dosage

"The Influence of 'Trypaflavine' (Acriflavine) and
Other Acridine Derivatives on the Organism of
Horses," A. Kolomoyshev, Vet Phys of
'Golopristsanskoy' Rayon Vet Hosp, $\frac{1}{2}$ p

"Veterinariya" ²⁶ No 6, 1948

Notes various precautions to be observed when
administering subject drug to horses infected
with hemosporidiosis.

31/49T74

KHMARA, S.M., inzh.; KOLOMOYTSEV, A.A., inzh.

Determining minimum thickness of die plates. Mashinostroenie
no. 5844-45 S-O '64 (MIRA 18:2)

KHMARA, S.M.; SMOLYANINOV, V.P.; KOLOMOYTSEV, A.A.

Causes of the crumbling-out of hard-alloy blanking dies. Kuz.-
shtam. proizv. 7 no.8:21-23 Ag '65. (MIRA 18:9)

KOLOMOYTSEV, A.P. ; LEVIN, E.G. (Sverdlovsk)

Unusual case of multiple homologous calculi of the left ureter in
hypoplasia of the left kidney. Urologia 24 no.2:62 Mr-Apr '59.
(MIRA 12:12)

(KIDNEY, abnormalities,
hypoplasia with homolateral ureterolithiasis (Rus))
(URETERS, calculi
in homolateral renal hypoplasia (Rus))

BARENBOYM, I.Yu., inzh.; DUBROVA, Ye.F., inzh.; KOLOMOYTSEV, B.H., inzh.;
PIDZHIYANTS, S.A., inzh.; VAINKOP, P.F., inzh.; RADZEVICH, Ye.N.,
inzh.; SPITKOVSKIY, S.A., inzh.

Planning and directing the construction of a bridge by a dash-
and-dot work organization chart. Transp. stroi. 15 no.2:14-18
F '65. (MIRA 18:3)

1. Mostostroy No.1 (for Kolomoyshev). 2. Nauchno-issledovatel'skiy
institut stroitel'nogo proizvodstva Gosstroya UkrSSR (for Vayakov).
3. Mostostroyad No.2 Mostostroya No.1 (for Spitkovskiy).

L 26377-66

ACC NR: AP6007660

(A)

SOURCE CODE: UR/0413/66/000/003/0028/0028

10
B

AUTHORS: Barenboym, I. Yu.; Dubrova, Ye. P.; Vasil'yev, V. D.; Izirik, N. M.; Radzevich, Ye. N.; Spitkovskiy, S. A.; Fuks, G. B.; Fel'dman, M. B.; Leybman, Ya. M.; Kolomoyshev, B. B.; Flaks, V. A.; Khandshi, V. V.; Gol'dfel'd, L. M.; Lifshits, I. L.

ORG: none

TITLE: A means of erecting railroad bridges of arched-span construction from separate sections. Class 19, No. 178393

SOURCE: Izobreteniya, promyshlennyye obraztzy, tovarnyye znaki, no. 3, 1966, 28

TOPIC TAGS: bridge, bridge construction, structural engineering, railroad bridge, cantilever bridge

ABSTRACT: This Author Certificate presents a means for erecting railroad bridges of arched span construction from separate sections. The sections are suspended and joined with struts of the structure above the arch by temporary sloping and horizontal members. These members serve as cross-stays and upper booms. The sections also feature a cantilever truss (see Fig. 1) with a triangular framing, the lower girder of which forms a semi-arch. The upper girder of the cantilever truss is set above the travel span, which includes separate elements of the truss used in mounting and elevating the structure. These members subsequently form a triangular cantilever

UDC: 624.624

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L 26377-66

ACC NR: AP6007660

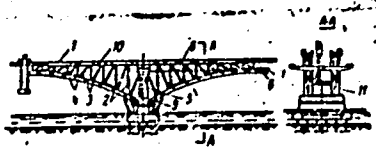


Fig. 1. 1 - upper string of the cantilever truss; 2 - struts; 3 - slanting members; 4 - lower string panels; 5 - anchor post; 6 - key block; 7 - floor plates; 8 - cables; 9 - anchor block; 10 - tension cables; 11 - joints.

frame, cross-stays and semi-arch sections. Each panel thus formed serves as a support for the next panel. The panels are rigidly fastened along the entire face, the process being repeated until the entire semi-arch is formed. Then cables are placed between the link sections and the support. When the cables are tightened, the semi-arches are rotated with respect to the support section, thus unloading the diagonal and horizontal members of the cantilever. The cables are removed, after which the travel-span plates are placed upon the structure above the arch between the link sections of the semi-arch and the support. When the wearing surface is completely laid, the remaining part of the cables is tightened. Favorable working conditions for the support are created by freeing the support from one-sided loadings; assembly of the semi-arch takes place simultaneously on both sides of the pier, with each addition being a cantilever addition. The abutment portion of the semi-arch is prepared in place between the first support block of the semi-arch and the pier. Forces in members of the cantilever are lessened by the introduction of stiffener cables in the upper girder at $1/2$ -- $2/3$ of its design length. Moments in panels on the semi-arch are reduced through a skewed arrangement of axes of diagonals relative to points of intersection of the axes of vertical members and the semi-arch blocks. Joints are placed between adjacent semi-arches on the assembled panels, thus controlling the position of cantilever frames in the span. Orig. art. has: 1 figure.

Card 2/2 SUB CODE: 15/ SUBM DATE: 14Nov64

BARTASHEVSKIY, Ye.L. [Bartashevs'kyi, IE.L.]; KOLOMOYTSEV, F.I.
[Kolomoitsev, F.I.]; KODZHESPIROV, F.F.; POGOREL'SKIY, A.Ye.
[Pohorel'skyi, A.IE.]; SIVTSEV, D.S.; YAKUNIN, A.Ya.
[IAkunin, O.IA]

Relationship between saturation magnetization and the parameters
of ferrites used in the superhigh-frequency technique. Ukr.
fiz. zhur. 8 no.8:894-899 Ag '63. (MIRA 16:11)

1. Dnepropetrovskiy gosudarstvennyy universitet.

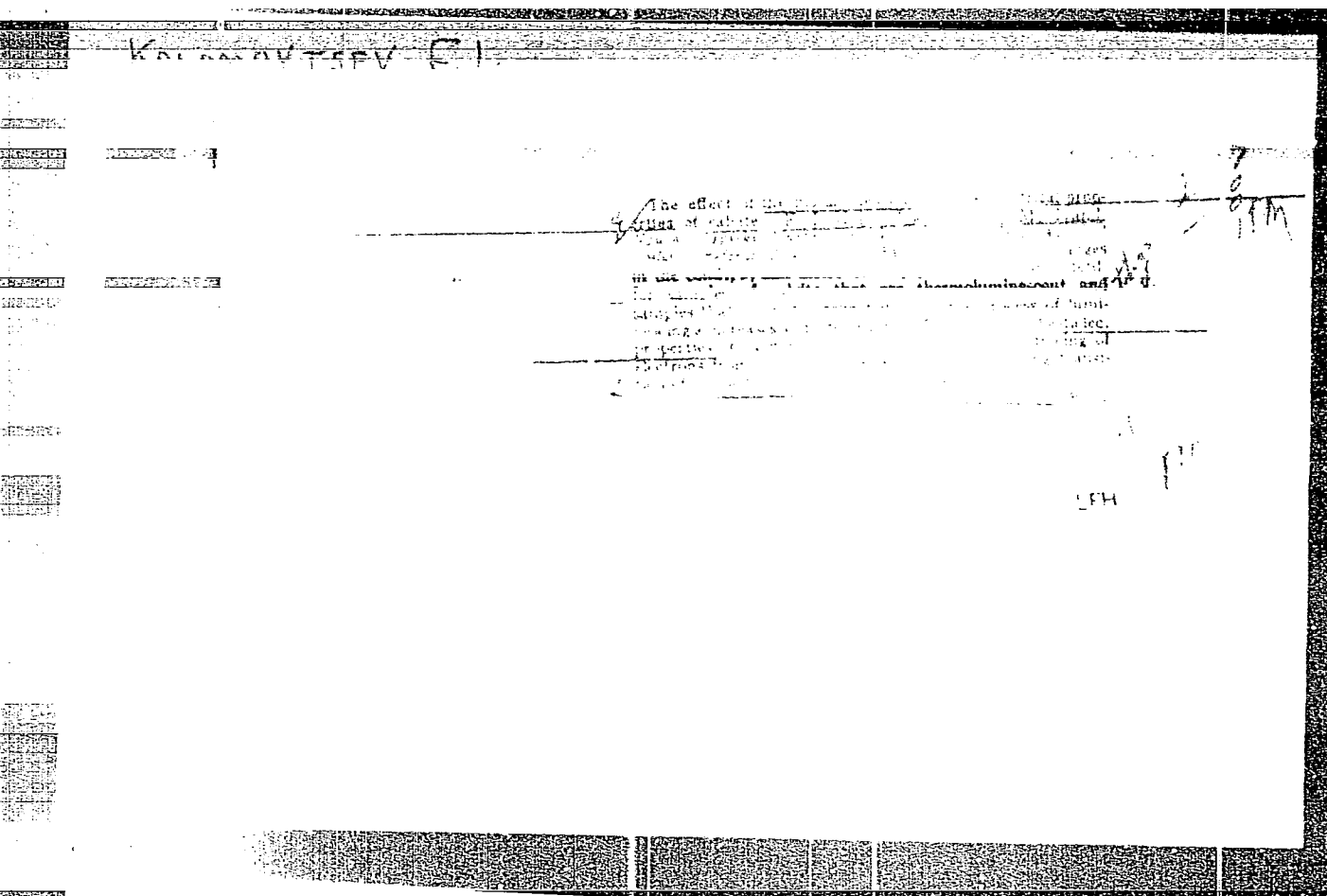
AFANASENKO, B.I.; BARTASHEVSKIY, Ye.L.; KOLOMOYTSEV, F.I.; VORONKOV, N.I.,
otsent, otv. za vypusk

[Using a water wave nucleus to measure the dielectric characteristics
of liquids] Izmerenie dielektricheskikh kharakteristik malopoternykh
zhidkostei s pomoshch'iu volnovodnoi iacheiki. Dnepropetrovsk,
1960. 8 p. (Dnepropetrovsk. Inzhenerno-stroitel'nyi institut.
Nauchnoe soobshchenie, no.60). (MIRA 16:8)

1. Zamestitel' direktora Dnepropetrovskogo inzhenerno-stroitel'nogo
instituta po nauchnoy rabote (for Voronkov).
(Liquids--Electric properties)

CA KOLOMOYTSKY, F.I.

Change in the electrical properties of calcite in relation to its temperature deluminescence. E. I. Kolomoysky. Doklady Akad. Nauk S.S.S.R. 75, 185-8 (1960). The theory that the nonpolarizing current in calcite is produced by electrons in bound levels when they are excited thermally in a space band in a strong field is verified by measurements (results shown in a graph) of the time dependence of the temp. T , of the current I flowing through the sample, and of the depolarization residue P . Natural samples of calcite show a double max. of current and a max. of depolarization between 140 and 160°. Repeated heating of the sample causes the dielec. const. to decrease by 20%; after the deluminescence of the sample is completed, the dielec. const. is not changed by further heating of the sample since the depletion of traps during heating is irreversible. A polarization layer is formed when voltage is applied. The results of the measurements show that electron transitions and electron cond. are important in dielectrics; electrons are removed from bound levels owing to the formation of coned. polarization layers in some dielectrics; the depletion of electron traps in calcite explains the dependence of the dielec. const. on the temp. and field. E. H. Dunlap



KOLOMOYTSEV, F.I.

AUTHOR:

KOLOMOYTSEV, F.I., KODZHESPIROV, F.F.

TITLE:

Rise of E.M.F. in Amorphous Selenium under X-Rays Action.
(Vozniknoveniye elektrodvishushchikh sil v amorfnoy selene pod
deystviyem rentgenovskogo izlucheniya, Russian)

PA - 3538

PERIODICAL:

Zhurnal Tekhn. Fiz., 1957, Vol 27, Nr 5, pp 899 - 904 (U.S.S.R.)

ABSTRACT:

In analogy to the crystal photoeffect in visible light, a phenomenon can be observed in amorphous selenium, which is regarded as characteristic only of crystal semiconductors. On the basis of the example of selenium it can be maintained that also in amorphous substances a diffusion of the holes (and electrons) liberated by radiation is possible in the mass of the substance. The electromotiric force produced on the occasion of the irradiation of selenium changes with respect to time according to an exponential law (sum of two exponents). The time constant depends upon the darkness resistance of the sample, upon temperature, and the intensity of the irradiation. The dependences obtained of the produced E.M.F. upon temperature and irradiation intensity adapt themselves to the framework of the diffusion theory. (1 table and 9 Slavic references)

ASSOCIATION:

Not given

PRESENTED BY:

SUBMITTED:

17.4.1956

AVAILABLE:

Library of Congress

Card 1/1

88693

9.2000 (1001, 1024, 1331)

S/058/60/000/010/002/014
A001/A001

Translation from: Referativnyy zhurnal, Fizika, 1960, No. 10, pp. 251-252, # 26995

AUTHORS: Kolomoyssev, F.I., Yakunin, A.Ya., Sviridenko, O.N.

TITLE: Measurements of Electromotive Forces Induced in Dielectrics Irradiated by X-Rays

PERIODICAL: Nauchn. zap. Dnepropetr. un-t, 1957, Vol. 72, pp. 3 - 6

TEXT: The authors measured emf \mathcal{E} induced in polyethylene insulation by X-ray irradiation (voltage in a X-ray tube was 48 kv, current was 12 ma). The temperature course of emf was established within the range of temperatures from -30 to $+70^{\circ}\text{C}$; it obeys the law: $\mathcal{E} = A \exp(u/kT)$, where $u = 0.5 \text{ ev}$, $A = 1.7 \times 10^{-7} \text{ v}$ is a constant. At a temperature of -30°C the \mathcal{E} -value attains $\sim 10^{-3} \text{ v}$. The temperature dependence of polyethylene electric conductivity was measured for the cases when an external voltage is of the same or the opposite sign to that of induced \mathcal{E} , as well as the temperature dependence of dark electrical conductivity. It follows

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Measurements of Electromotive Forces Induced in Dielectrics Irradiated by X-Rays

from the slope of the curves that the activation energy of dark carriers is higher than that of the induced ones. All the curves blend with the rising temperature, which indicates the lowering of the excitation effect at high temperatures.

A.Zh.

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

Professor F. I. Kolomoitsev and A. Ya. Yakunin, Dnepropetrovsk University (Dnepropetrovskiy universitet)

"The Variation of the electric conductivity and the EMF induced by X-ray radiation by temperature and the intensity of the X-rays in polyethylene, polystyrene, teflon, polymethylmethacrylate, mica, and other dielectrics"

Report presented at a Conference on Solid Dielectrics and Semiconductors,
Tomsk Polytechnical Inst., 3-8 Feb. 58.
(Elektrichestvo, '58, No. 7, 83-86)

KOLOMOYTSEV, F. I.

Kolomoitsev, F.I. and Kodzhespirov, F. F. [Dnepropetrovskiy gosudarstvennyy universitet, Dnepropetrovsk State University]. The origin of Electromotive Forces in Dielectrics Under the Influence of X-rays

Kolomoitsev, F. I. and Yakunin, A. Ya. [Dnepropetrovskiy gosudarstvennyy universitet (Dnepropetrovsk State University)] The Influence of X-rays on the Electroconductivity of Dielectrics

(The Physics of Dielectrics; Transactions of the All-Union Conference on the Physics of Dielectrics) Moscow, Izd-vo AN SSSR, 1956. 245 p. 3,000 copies printed.

This volume publishes reports presented at the All-Union Conference on the Physics of Dielectrics, held in Dnepropetrovsk in August 1956 sponsored by the "Physics of Dielectrics" Laboratory of the Fizicheskii Institut imeni Lebedeva AN SSSR (Physics Institute imeni Lebedev of the AS USSR), and the Electrophysics Department of the Dnepropetrovskiy gosudarstvennyy universitet (Dnepropetrovsk State University).

SOV/139-58-5-27/35

AUTHORS: Kolomoyshev, F. I., Yakunin, A. Ya.

TITLE: The Effect of Electromotive Forces Produced by X-ray Irradiation of Dielectrics on Relationships which Govern the Induced Current (Vliyaniye E.D.S., vznikayushchikh pri rentgenoblichenii v dielektrikakh, na zakonomernosti navedennogo toka)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, fizika, 1958, Nr 5, pp 127-132 (USSR)

ABSTRACT: The paper was presented at the Conference of Higher Educational Establishments on Dielectrics and Semiconductors at Tomsk, February, 1958. Irradiation with photons increases electrical conductivity of dielectrics and produces e.m.f.'s between electrodes of an irradiated sample. In work on the increase of electrical conductivity of dielectrics by photon irradiation the induced e.m.f.'s are usually neglected. The present authors deal with these neglected e.m.f.'s and show that their actual values may be very high (of the order of hundreds or thousands of volts). Fig.1 gives the usual electric circuit employed in measurement of changes in electrical conductivity of dielectrics (Fig.1a) and the equivalent representation of this circuit (Fig.1b). E and R_i are the

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SOV/139-58-5-27/35

The Effect of Electromotive Forces Produced by X-ray Irradiation of Dielectrics on Relationships which Govern the Induced Current

e.m.f. and internal resistance of an external voltage source, R_H is a standard resistance, R_0 is the resistance of a sample under irradiation and ϵ is the e.m.f. induced by irradiation. Since $R_0 \gg R_H \gg R_i$, even a high value of ϵ produces only a small drop of potential across the standard resistance R_H ; this drop may be only 0.1 to 0.0001 V. The authors describe several methods of determination of the e.m.f.'s induced by irradiation. One of these methods is a compensation method: the induced e.m.f. is compensated by reverse potential from a battery E . Since the induced e.m.f. depends on the intensity of incident X-rays and on the sample temperature, the compensation may be produced by a change of temperature or X-ray intensity and keeping the value of E constant. The second method described is based on the measurement of currents in the circuit when E and ϵ act in the same sense and when they are opposed to each other. The

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SOV/139-58-5-27/35

The Effect of Electromotive Forces Produced by X-ray Irradiation of Dielectrics on Relationships which Govern the Induced Current

current due to the external voltage source is equal to the arithmetic mean of the two measurements:

$$I_{av} = 1/2 (I_+ + I_-)$$
 . The current due to the induced e.m.f. is

$I_{\epsilon} = I_{av} - I_+ = I - I_{av}$ and the value of the induced e.m.f. is given by $\epsilon = EI_{\epsilon}/I_{av}$. The induced e.m.f. may be also

measured directly by means of an electrostatic voltmeter connected directly to the sample. The internal resistance of such a voltmeter and insulation of the leads should exceed the resistance of the sample by two to three orders of magnitude. Measurements made using these three methods gave identical results and showed that at low temperatures and high X-ray intensities the value of the induced e.m.f. may be of the order of hundreds and thousands of volts. The front (irradiated) electrode of the sample has a positive potential with respect to the back electrode. The induced e.m.f. affects greatly the value of the current passing through the dielectric. Such effects were found in polystyrene, polyethylene, Teflon, polymethylmethacrylate, mica, etc. Voltage-current characteristics at various X-ray intensities are given in Fig. 2 for

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SOV/139-58-5-27/35

The Effect of Electromotive Forces Produced by X-ray Irradiation of Dielectrics on Relationships which Govern the Induced Current

a sample of mica at 30°C. The straight lines 1 to 5 of Fig.2 were obtained at increasing X-ray intensities: the X-ray tube current was 1 mA for line 1 and 14 mA for line 5. The lines do not pass through the origin of coordinates but cut the axis at values from 100 V up. Fig.2 shows that the induced e.m.f. ϵ (given by the points where the straight lines cut the abscissa) rise with increase of the X-ray intensity. The straight lines all intersect at a point whose abscissa gives the maximum value of the induced e.m.f. at the temperature of the experiment. The induced e.m.f. varies exponentially with temperature:

$$\epsilon = A e^{\frac{U_e}{kT}} \quad (2)$$

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SOV/139-58-5-27/35

The Effect of Electromotive Forces Produced by X-ray Irradiation of Dielectrics on Relationships which Govern the Induced Current

Fig.3 gives the change of current with temperature in polymethylmethacrylate for the same (curve 1) and opposed (curve 2) senses of external and induced e.m.f. Curve 3 in Fig.3 gives the true current. This difference between currents with the coincident and opposing senses of the external and induced voltages would affect greatly any measurement of the temperature dependence of the electrical conductivity of a dielectric, if this conductivity was deduced from the current. The conductivity curves for polymethylmethacrylate (Flexiglas) are given in Fig.4. The three pairs of curves were obtained at applied voltages of ± 90 , ± 388 , ± 1512 V. The seventh characteristic, which is a straight line, symmetrical to that of the other curves, gives the true dependence of the electrical conductivity obtained by allowing for the currents flowing due to induced e.m.f.'s. The temperature dependence of the true electrical conductivity is also given by an exponential law:

$$-\frac{U}{kT}$$

$$\sigma_{\text{true}} = \sigma_0 e$$

(3)

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SOV/139-58-5-27/35

The Effect of Electromotive Forces Produced by X-ray Irradiation of Dielectrics on Relationships which Govern the Induced Current

The energy of activation in Eq.(3) and the energy occurring in Eq.(2) were found to be equal: $U = U_0$. Fig.5 gives the dependence of current in polystyrene on X-ray intensity at applied voltages of -272 V (curve 1) and +272 V (curve 2). Using the method of average currents, the effect of induced e.m.f. may be allowed for and a true dependence of current on X-ray intensity can be constructed (curve 3, Fig.5). The dependence of the true current and true electrical conductivity on the X-ray intensity is given by a power law:

$I = aP^n$, where a and n are constants and P is the X-ray intensity. The induced e.m.f. is given by a similar power law :

$\epsilon = bP^m$ (Fig.6); again, b and m are constants and $n + m \approx 1$. The induced e.m.f. is due primarily to differences between the conditions of absorption of X-ray

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SOV/139-58-5-27/35

The Effect of Electromotive Forces Produced by X-ray Irradiation of Dielectrics on Relationships which Govern the Induced Current

energy and the front and back electrodes of the dielectric. This produces a gradient of current carriers across the sample. The work reported is summarised in the following conclusions:

- 1) X-rays and other photons of sufficient energy produce e.m.f.'s in dielectrics which may be of the order of hundreds and thousands of volts at high X-ray intensities.
- 2) The induced e.m.f.'s and the applied voltages from external sources are algebraically additive; it follows that the induced e.m.f.'s should be allowed for any experiments in photoinduced conductivity of dielectrics.
- 3) The induced e.m.f.'s increase with the X-ray intensity following a power law and they fall exponentially with temperature.

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SOV/139-58-5-27/35
The Effect of Electromotive Forces Produced by X-ray Irradiation of
Dielectrics on Relationships which Govern the Induced Current

There are 6 figures and 20 references; 16 of the references
are Soviet, 2 are English and 2 German.

ASSOCIATION: Dnepropetrovskiy gosuniversitet (Dnepropetrovsk State
University)

SUBMITTED: April 7, 1958.

Card 8/8

KOLOMOYTSEV, F.I.; IZHAK, I.A.

Depolarization discharge in barium titanate and its relation to
the piezo effect. Fiz.tver.tela 1 no.12:1791-1793 D '59.
(MIRA 13:5)

1. Dnepropetrovskiy gosudarstvennyy universitet.
(Barium titanate crystals)
(Piezoelectricity)

KOLOMOY TSEV, F.I.

[illegible]

KOLOMOYTSEV, F.I., doktor tekhn.nauk, prof.; STAUZER, Ye.V. (Dnepropetrovsk)

Electroluminescence. Nauka i zhyttia 11 no.2:18-19 F '61.
(MIRA 14:3)

(Flourescent lighting)
(Television-Apparatus and supplies)

21-7100

30411

S/058/61/000/009/029/050

AO01/A101

AUTHORS: Kolomoyshev, F.I., Yakunin, A.Ya.

TITLE: Dependence of additional electric conductivity and emf induced by X-ray irradiation on thickness of dielectric specimens

PERIODICAL: Referativnyy zhurnal. Fizika, no. 9, 1961, 200, abstract 9E156 (V sb. "Fizika dielektrikov", Moscow, AN SSSR, 1960, 495 - 499)

TEXT: Measurements of additional electric conductivity $\Delta \sigma$, induced by X-ray irradiation, in specimens of polystyrene and polycrystalline S have shown that theoretical linear dependence of $\Delta \sigma$ on specimen thickness d is confirmed and that changes of d do not lead to changes in the nature of dependence of $\Delta \sigma$ on temperature, irradiation intensity and field strength E . The theoretical dependence of induced emf on irradiation intensity at various electrodes is also well confirmed by experiments. X

V. K.

[Abstracter's note: Complete translation]

Card 1/1

30412

S/058/61/000/009/030/050
AC01/A101

21.7100

AUTHORS: Kolomoyshev, F.I., Mitskevich, P.K., Bobyl', V.G., Yakunin, A.Ya.

TITLE: Comparison of some properties of solid and liquid dielectrics subjected to irradiation

PERIODICAL: Referativnyi zhurnal. Fizika, no. 9, 1961, 201, abstract 9E157 (V sb. "Fizika dielektrikov", Moscow, AN SSSR, 1960, 510 - 517)

TEXT: Experimental dependences of electric conductivity σ on irradiation of solid dielectrics (I) (mica, quartz, polyethylene, polystyrene, polytetrafluoroethylene, polymethyl methacrylate, etc) were compared with those of liquid dielectrics (II) (chloroform, bromoform-ether, bromoform-anisole, iodoform-ether, chlorophenol, bromobenzene, etc). It was found that increase of σ during irradiation and decrease at discontinuation of irradiation was caused by fixing charge carriers on metastable levels with their subsequent thermal liberation. Additional $\Delta\sigma$ (at irradiation) depends on the nature and intensity of irradiation and on the purity of the dielectric. After discontinuation of irradiation $\Delta\sigma$ decreases with time proportional to $t^{-1/2}$ (liberation of charge carriers from metastable levels). $\Delta\sigma$ is proportional to field strength up to fields with 10^4 v/cm

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30412

Comparison of some properties of solid and liquid ... S/058/61/000/009/030/050
AC01/A101

(the law holds at changes of temperature T and intensity of irradiation). For II, $\Delta\sigma$ is higher by $10^2 - 10^3$ times than for I. $\Delta\sigma \propto \epsilon^{\gamma}$ (ϵ is intensity of irradiation; $0.5 \leq \gamma \leq 1$). It is shown that $\lg \Delta\sigma \sim 1/T$.
V. K.

[Abstracter's note: Complete translation]

Card 2/2

21390

S/194/61/000/009/047/053
D271/D302

4,2110
AUTHOR:

Afanesenko, B.I., Bartashevskiy, Ye.L. and Kolomoyshev, F.I.

TITLE:

Measuring dielectric characteristics of low-loss liquids by means of a waveguide cell

PERIODICAL:

Referativnyy zhurnal. Avtomatika i radioelektronika, no. 9, 1961, 62, abstract 9 I362 (Nauchn. soobshch. Dnepropetr. inzh.-stroit. in-t, 1960, no. 60, 8 pp., ill.)

TEXT:

A brief survey of methods for measuring dielectrics in the microwave region. A method is considered for measuring liquids by a waveguide section with an adjustable short-circuiting stub. The stub makes it possible to vary the length of the section and the volume of liquid. Parameters of the investigated liquid, ϵ and $\tan \delta$ are calculated on the basis of readings of the indicator belonging to the measuring line, inserted between the generator

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Measuring dielectric...

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S/194/61/000/009/047/053
D271/D302

and the cell; readings are taken with various thicknesses of the liquid layer. The deficiencies of this method when applied to low-loss liquids are considered. In order to improve accuracy in this case it is proposed using a cell of constant length l . λ_b and the coefficient of travelling wave (KBV) are measured by means of the measuring line. Attenuation per unit length is calculated by the formula $\alpha = \frac{KBV}{l}$. Formulae are given for computing ϵ' , ϵ'' and $\tan \delta$ from measured values of λ_b , α and λ_e where λ_e is the wavelength in the dielectric. Results are given of measuring parameters of glycerin and other liquids at the wavelength of 3.2 cm. The results show that the error in determining ϵ' does not exceed 3% and in determining ϵ'' - 10%. 9 references. [Abstracter's note: Complete translation]

Card 2/2

34435
S/185/61/006/006/013/030
D299/D304

24,3500 (1137,1138)

AUTHORS:

Kolomoitsev, F.I., and Staayer, E.V.

TITLE:

Influence of copper concentration on the optical- and electrical properties of ZnS-Cu phosphors

PERIODICAL:

Ukrayins'kyy fizychnyy zhurnal, v. 6, no. 6, 1961,
781 - 784

TEXT: Two methods were used for preparing the electroluminescent phosphors. The permittivity of the phosphors was measured by means of an a.c.-bridge, the resistance -- by the megohmmeter MOM-4 (MOM-4). On increasing the Cu concentration in ZnS-Cu phosphors, their electrical conductivity increases gradually. If the Cu concentration exceeds 10^{-3} gm per 1 gm of ZnS, the copper no longer enters the ZnS lattice, but remains on the grain surface in the form of a conducting phase; thereby the conductivity increases by 5-6 orders of magnitude. A further increase in Cu concentration leads but to a slight increase in conductivity. Phosphors which have a low Cu-concentration, are photoconductive. With increasing Cu-con-

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... is given
ZnS-Cu phosphors de-
At temperatures below
... At temperatures below
... If the tem-
... the conductivity decreases by 3-4

Influence of copper concentration ...

S/185/61/006/006/013/030
D299/D304

orders of magnitude, reaching a minimum at 500 - 600°C; then it increases again. The permittivity first decreases with increasing temperature and then increases. The photoluminescence is greatest for temperatures of 600°C, and the electroluminescence -- for 800 - 900°C. If the green luminophor $\phi K-106$ (FK-106), used in the second method of phosphor preparation, is put in a copper-salt solution and then dried at a moderate temperature, it becomes electroluminescent. The atmosphere of annealing is of great influence on the emission spectrum. The brightness is greatest at those Cu concentrations and temperature, at which the conductivity of the ZnS-Cu phosphors increases sharply. The increase in permittivity at low frequencies is due to the presence of Cu_2S or ZnO in the conducting phase and to the ratio between the ZnS phases. Hence the capacitance of an electroluminescent capacitor with a nonhomogeneous dielectric is frequency dependent, increasing with decreasing frequency. There are 3 figures and 7 references: 2 Soviet-bloc and 5 non-Soviet-bloc. The references to the English-language publications read as follows: P. Zalm, Phil. Res. Rep., 11, 353, 1956; S. Roberts, JOSA, 42, 850, 1952; W. Lehmann, J. Electrochem. Soc., 103, 24, 1956; A.N. Ince, C Card 3/4

Influence of copper concentration ...

S/185/61/006/006/013/030
D299/D304

W. Oatley, Phil. Mag., 46, 1081, 1955.

ASSOCIATION: Dnipropetrovs'kyi derzhavnyi universytet im. 300-rich-
chya vozz'yednannya Ukrayiny z Rosiyeyu (Dniprope-
trovs'k State University im. 300-th Anniversary of the
Ukraine's Union with Russia)

X

Card 4/4

7.2571 (also 1163)

15.2450

30032
S/048/61/025/011/028/031
B117/B102

AUTHORS: Kolomoitsev, F. I., Kodzhespirov, F. F., Yakunin, A. Ya.,
and Sinyakov, Ye. V.

TITLE: Some possibilities of improving the quality of superhigh-
frequency ferrites

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 25,
no. 11, 1961, 1422-1426

TEXT: Ferrites with the composition $\text{MgAl}_{0.3}\text{Fe}_{1.7}\text{O}_4$ (Ref. 1: Smolenskiy
G. A., Gurevich, A. G., Poluprovodniki v nauke i tekhnike (Semiconductors
in science and engineering), v. II. Izd. AN SSSR, 1958; Refs. 2 and 3:
see below) were examined. These ferrites were prepared from the oxides
by the usual technique, namely, at different temperatures of preliminary
annealing T_{pre} and of final annealing T_{fin} . Experiments showed that the
magnetization of a single formula unit of ferrite changes in the range of
 $0.78 \leq m \leq 1.30$ when the sintering technique is varied. An increase of the
annealing temperature and slow cooling result in lower values of the

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30082
S/048/61/025/011/028/031
B117/B102

Some possibilities of ...

saturation magnetization m , and yields a better ordered spinel. At the same time, the ferrite density ρ increased so much that $m\rho$ and, consequently, the activity of the specimens increased as well. $m\rho$ and the phase shift $\Delta\psi$ are interrelated. A less ordered distribution of metal ions in the lattice was observed when the specimens were chilled. This led to excessively high values of m and $\Delta\psi$. These conclusions were substantiated by an X-ray determination of the lattice constants. It is possible to reduce the losses by a proper choice of annealing temperatures. The following conditions of heat treatment in the furnaces with constant cooling time $\tau = 15$ hr are suggested for Al-Mg ferrites: $T_{pre} = 1100^{\circ}-1120^{\circ}\text{C}$ (4-6 hr); $T_{fin} = 1200^{\circ}-1150^{\circ}\text{C}$ (4-6 hr). Al-Mg

ferrites as well as other ferrite types can be improved as to activity and losses by additional heating in a suitable atmosphere. It is finally stated that the quality of ferrites can be improved by separate regulation of their activity and losses. As to Al-Mg ferrites, it is recommended that the sintering temperatures should not be higher than 1200°C . Quicker cooling at adequate temperature and duration of annealing is of decisive importance to an increase of activity. Losses are reduced by annealing in an oxygen-saturated atmosphere or in an oxygen stream. In this case large

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30082
S/048/61/025/011/028/031
B117/B102

Some possibilities of ...

crystallites must be prevented from forming in the polycrystalline system. There are 2 figures, 3 tables, and 9 references: 5 Soviet and 4 non-Soviet. The three references to English-language publications read as follows: Ref. 2: Vitert L. G., Schafer I. P., Hogan C. L., J. Appl. Phys., 25, no. 7 (1954); Ref. 3: Vitert L. G., J. Appl. Phys., 28, no. 3 (1957); Blackman A. B., J. Amer. Cer. Soc., III, 42, no. 3 (1959).

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33648

S/051/62/012/001/017/020
E075/E436

24,3500 (1137,1138,1144)

AUTHORS: Kolomoitsev, F.I., Izotov, V.P., Stauer, E.V.
TITLE: Luminescence of phosphorescent powders in electrical field

PERIODICAL: Optika i spektroskopiya, v.12, no.1, 1962, 127-129

TEXT: The authors investigated the causes of light emission in luminescent powders. Observations were made of light emission under the action of electrical field from self-activated zinc sulphide, zinc and cadmium sulphides activated with silver or copper, zinc silicate, mixed zinc and beryllium silicates, calcium and manganese tungstates, calcium and cadmium halophosphates, manganese arsenate, natural calcites, fluorites and other materials. Some of these compounds shine without any preparation but some of them begin to emit light only after treatment with solutions of various salts (e.g. Na_2SiO_3). The concentration of the added salt was of the order of 1×10^{-3} salt/g of powder. When the tension across a condenser filled with a phosphorescent powder is increased, the powder begins to shine, the process becoming more intense with further increases in tension. Periods of time from fractions of second to several minutes are necessary for the

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in direct contact with the

33648

Luminescence of phosphorescent ...

S/051/62/012/001/017/020
E075/E436

electrodes arises both at the positive and negative electrodes, the authors conclude that the observed luminescence is anodo- and/or cathodoluminescence. There are 2 figures and 10 references: 3 Soviet-bloc and 7 non-Soviet-bloc. The four most recent references to English language publications read as follows: Ref.3: G. Destriau, H.F.Ivey. Proc. IRE, v.43, 1955, 1911; Ref.6: G. Wendell. Ann. Phys., v.12, 1953, 222; Ref.7: J.N.Bowtell, H.C.Bate. Proc. IRE, v.44, 1956, 697; Ref.8: H.C.Bate, J.N.Bowtell. Brit. Pat. 788 659, 8.01.58; 800 581, 27.08.58.

SUBMITTED: July 3, 1961

Card 3/3

KOLOMOYTSEV, F.I.; IZOTOV, V.P.; STAUER, E.V.

Luminescence of powdery phosphors in an electric field.

Opt. i spektr. 12 no.1:127-129 Ja '62.

(MIRA 15:2)

(Phosphors)

(Electric fields)

SOURCE: Ref. zh. Fiz., Abs. 4D602

Ismaylov, R. I.

SUBJECT: Some manifestations of thermoluminescence of fluorite
 Zh. fiz. i inzh. elektrotekh. in-13, vy*1, 51 1963,

ABSTRACT: The thermoluminescence (TL) of natural fluorite crystals was studied as functions of the hardness of the crystals, of the hardness of the surface of the crystals, of the hardness of the surface of the crystals, of the hardness of the surface of the crystals. The TL was calculated for the region of the surface of the crystals. The TL was calculated for the region of the surface of the crystals. The TL was calculated for the region of the surface of the crystals.

Card 1/2

AR4039914

levels. The redistribution of the stored light over the individual levels is attributed to the different nature of the sticking levels.

SUR CODE: OP

ENCL: 00

L 13101-63

EWI(1)/BDS AFFTC/ASD/SSD

ACCESSION NR: AP3003415

S/0051/63/015/001/0089/0094

AUTHOR: Kolomoitsev, F.I.; Korsun', V.M.; Lazorina, S.M.; Stauer, E.V.

55
54

TITLE: Red electroluminescence^{of} ZnSe and CdS:Cu phosphors

SOURCE: Optika i spektroskopiya, v.15, no.1, 1963, 89-94

TOPIC TAGS: electroluminescence, ZnSe phosphor, CdS phosphor, ZnSe-CdS phosphor

ABSTRACT: The brightest electroluminophors now known (zinc sulfide phosphors) can be prepared to emit predominantly in the blue, green or yellow regions, depending on the activator introduced. ZnS:Cu has been reported to electroluminesce red, but its intensity is low. The paper describes the preparation of red electroluminescing phosphors by heating luminescence pure ZnSe with CdS and different fluxes with limited access of air. The lattice constants of these compounds are close so that solid solutions should form in a wide range of concentrations. The authors also prepared and tested CdS:Cu and ZnSe:Cu phosphors. The electroluminescence spectra were recorded on a Zeiss monochromator coupled to an FEU-22 photomultiplier. The powdered phosphors were suspended in silicone oil as a demountable capacitor. The conductivity of the phosphors was found by measuring the resistance of the capacitor; the dielectric constant by measuring the capacitance by means of

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L 13101-63

ACCESSION NR: AP3003415

low and high frequency bridges. Curves showing the variation in electroluminescence brightness as a function of the flux concentration, heating time, heating temperature, and so on are reproduced. Both the photo- and electroluminescence of the phosphors deteriorate with time when these are stored in the presence of air. The effects of different factors including the Cu concentration are discussed. The properties of ZnSe:CdS phosphors vary, but generally the addition of CdS shifts the emission of ZnSe to the long wavelength side. "In conclusion the authors express their gratitude to A.I.Andriyevskiy for some measurements." Orig.art.has: 6 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 16Jul62

DATE ACQ: 30Jul63

ENCL: 00

SUB CODE: PH

NO REF SOV: 006

OTHER: 005

Card 2/2

S/0051/64/016/001/0092/0096

ACCESSION NR: AP4011489

AUTHOR: Kolomoitsev, F.I.; Korsun', V.M.

TITLE: Combined effect of short electric pulses and a sinusoidal voltage on the electroluminescence of ZnS:Cu phosphor

SOURCE: Optika i spektroskopiya, v.16, no.1, 1964, 92-96

TOPIC TAGS: electroluminescence, zinc sulfide phosphor, copper activated zinc sulfide, pulse excitation, ac excitation, active current, conductivity, brightness wave, injection current

ABSTRACT: The paper describes the results of observation of the conductivity and luminescence of ZnS:Cu phosphor under joint excitation by a sinusoidal voltage and square pulses. The phosphor was prepared by the procedure described by O.N.Kazankin, F.M.Pekerman and A.N.Petoshina (Sborn.tr.GIPKh, No.43,43,1960). It was mixed in the proportions of 1 to 1 with silicone oil and this mixture was used to fill an electroluminescent capacitor, one electrode of which was a plate of conducting glass, the other a plate of aluminum. The duration of the square pulses was 10 microsec. The phase of the pulses with respect to the sinusoidal voltage was varied in the

Card ^{1/2}

ACC.NR: AP4011489

full range from 0 to 4π . Under these conditions the short pulses may be regarded as a sort of probe or means of determining what occurs during different phases of excitation. The results of the measurements of luminescence and conductivity indicate that excitation and recombination of the luminescence centers occurs at different points of the applied ac voltage cycle. The current through the luminophor has the character of an injection current and is responsible for excitation of the phosphor. Orig.art.has: 2 figures.

ASSOCIATION: none

SUBMITTED: 04Apr63

DATE ACQ: 14Feb64

ENCL: 00

SUB CODE: PH

NR REF SOV: 002

OTHER: 004

Card 2/2

ACCESSION NR: AP4036570

S/0139/64/000/002/0142/0146

AUTHORS: Kodzhespirov, F. F.; Kolomoitsev, F. I.; Yakunin, A. Ya.

TITLE: Photoconductivity of teflon-3, stimulated by x-rays

SOURCE: IVUZ. Fizika, no. 2, 1964, 142-146

TOPIC TAGS: photoconductivity, teflon, x ray, copper anticathode, induced current, electric field, relaxation delay, URS 70

ABSTRACT: The x-ray induced electrical conductivity and photoconductive properties in teflon-3 were investigated experimentally for various temperatures, electric fields, and x-ray intensities. Measurements were made in 5×10^{-5} mm Hg vacuum on 25 mm diameter disk-shaped specimens. Specimen potential was obtained from BAS-G-30 batteries, and the x-ray source used was a URS-70 equipment with BSV tube and a copper anticathode. The time dependence of the induced current I at various thicknesses (1 mm, 0.025 mm) under 1.5×10^4 V/cm electric field was found to obey the

law $I = I_0 \left(1 - e^{-\frac{t}{\tau}} \right)$. A graph of relative relaxation delay plotted against induced current showed no dependence on the applied voltage. Curves for radiation followed by blackout plotted against time showed a dependence of the form $\lg(I - I_0) = f(t)$.

Card 1/2

APGC(b)/PAEM(e)/ESD(dp)/ESD(gp)/ESD(t)/IJP(c) GG
AP5000352 006/0916/0922

Kolomoitsev, F. I.; Kodzhespirov, F. F.; Kostylev, S. A.

... fluorescence of the ...

... ..

... .. sulfide

...

Investigations were made of the active component of the current and the ...
... ..
... ..
... ..
The active component of the current was measured with a bridge method that
... ..
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... ..

1-30342-66 EWT(1)/EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP6015430

SOURCE CODE: UR/0051/66/020/005/0859/0865

AUTHOR: Kolomoitsev, F. I.; Korsun', V. M.

ORG: none

TITLE: Electroluminescence of zinc sulfide as recombination controlled by an electric field

SOURCE: Optika i spektroskopiya, v. 20, no. 5, 1966, 859-865

TOPIC TAGS: electroluminescence, zinc sulfide, recombination luminescence, electric field, crystal phosphor

ABSTRACT: The low inertia of the change in the luminescence brightness of a phosphor crystal with a change in the controlling electric field is taken as an indirect indication that restoration of equilibrium between the concentrations of free and captured charges takes place rapidly. This indirect experimental evidence is used as a basis for an approximate calculation of electroluminescence brightness waves as a process controlled by the electric field. A linear geometric approximation is used and processes on a single luminescence line are considered assuming that the direction of this line coincides with that of preferred electric conductivity in the crystal. Analytical expressions are given for the kinetics of charge motion in terms of external voltage and electric field strength with regard to charge density, specific inductive

UDC: 535.376

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1-30342-66
ACC NR: AP6015430

"APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000823920011-5"

capacitance and average charge mobility. It is shown that as the leading edge of the injected charge moves through the crystal, the electric field intensity which controls this motion increases continuously due to motion of the leading edge. The natural conductivity of the crystal tends to balance the resultant nonhomogeneity in the electric field. An approximate expression is derived for electroluminescence brightness as a function of time in zinc sulfide crystals. The theoretical approximation is compared with experimental data on attenuation of luminescence in copper-activated zinc sulfide phosphor single crystals. The results show that electroluminescence may be treated as a process caused by the motion of excess space charge injected into the phosphor material from the conductive phase. Orig. art. has: 2 figures, 21 formulas.

[14]

SUB CODE: 20/

SUBM DATE: 29Jan65/

ORIG REF: 003/

OTH REF: 006/

ATD PRESS: 5016

Card 2/2

L 28330-66 EWT(1) IJP(c)

ACC NR: AFG013081

SOURCE CODE: UR/0048/88/030/004/0684/0687

54
8

AUTHOR: Kolomoyshev, F. I.; Korsun', V. M.

ORG: Dnepropetrovsk State University (Dnepropetrovskiy gosudarstvennyy universitet)

TITLE: Electroluminescence of ZnS:Cu phosphors as recombination controlled by the electric field /Report, Fourteenth Conference on Luminescence held in Riga 16-23 September 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 4, 1966, 684-687

TOPIC TAGS: electroluminescence, crystal phosphor, zinc sulfide, recombination luminescence, electric field

ABSTRACT: Microscopic studies have revealed that electroluminescence of ZnS:Cu phosphors develops primarily in microvolumes in the form of thin luminous lines, sometimes called "comets". A.G.Fisher (J.Electrochem. Soc., 110, 733, 1963) hypothesized the existence of minute acicular inclusions, presumably of a second conducting phase of copper sulfide. In view of the difficulty of examining such inclusions with an optical microscope, the authors employed an electron microscope and the replica techniques for examining sections of hexagonal single crystals cut parallel and normal to the c axis. Linear caverns with dimensions of tenths of a micron and up were observed on polished surfaces. Etching brought out more caverns, but failed to

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L 28330-66

ACC NR: AP8013081

disclose any needle-like inhomogeneities. Concurrently with the electron microscope studies an optical microscope was employed to observe the electroluminescent formations. The lines or comets observed were oriented parallel to the elementary parallelogram of the hexagonal lattice. In some cases one comet head had multiple tails extending at an angle of 60 or 120° to each other. Sometimes it could be established that the brightest part of the luminous line, the comet head, was situated at an inclusion. There were recorded the voltage and time dependences of the brightness of individual comets under different forms of excitation: square pulses and a sinusoidal voltage. Under square pulses comets headed in one direction flashed with the rise of the pulse, while comets headed in the opposite direction flashed at termination of the pulse. With ac electroluminescence was observed only during one-half cycle. In addition, brightness waves from an individual comet were observed during simultaneous action of ac and dc. It is concluded that although there undoubtedly are present in electroluminescent ZnS:Cu crystals small inclusions of Cu₂S, there are no discernable inhomogeneities corresponding precisely to the luminous lines (comets). There is reason to assume that the electroluminescent lines extend approximately in the directions of best conduction. It would appear difficult to interpret the experimental data from the standpoint of the impact ionization. An attempt is made to explain and describe the effects as a recombination process controlled by the local electric field. Some theoretical calculations that are generally consistent with the experimental data are adduced. Evaluations lead to a reasonable value for the carrier mobility. Orig. art. has: 6 formulas.

SUB CODE: 20/

SUBM DATE: 00/

ORIG REF: 000/

OTH REF: 005

Card 2/2 CC

L 33435-66 EWT(1) IJP(c)
ACC NR: AP6013458

SOURCE CODE: UR/0139/66/000/002/0043/0050
68

AUTHOR: Bartashevskiy, Ye. L.; Kolomoitsev, F. I.

ORG: Dnepropetrovsk State University (Dnepropetrovskiy gosuniver-
sitet)

TITLE: Effect of heat-treatment conditions on the electrical conductivity of super-high-frequency magnesium-base ferrites

SOURCE: IVUZ. Fizika, no. 2, 1966, 43-50

TOPIC TAGS: electric conductivity, ion concentration, superhigh frequency, magnesium, ferrite, ~~heat treatment~~ METAL HEAT TREATMENT

ABSTRACT: The electrical conductivity of aluminum-magnesium, magnesium-chromium, and magnesium-manganese ferrites has been investigated. Electrical conductivity measurements were carried out by the d-c two-electrode method at temperatures -30— + 300C. The effect of measurement conditions (materials, method of electrode application, and moisture in the surrounding medium) on the results obtained was analyzed. Measurements were made of the temperature curve of the electrical conductivity relative to the ferrite heat-treatment conditions (temperatures of preliminary and final annealings, atmospheres of the supple-

Card 1/2

ACC NR: AT6028991

SOURCE CODE: UR/0000/66/000/000/0278/0283

AUTHORS: Kolomoitsev, P. I.; Bartashevskiy, Ye. L.

ORG: none

TITLE: Varying the parameters of noncoupled ferrite phase inverters by an additional thermal treatment

SOURCE: Vsesoyuznoye soveshchaniye po ferritam. 4th, Minsk. Fizicheskiye i fiziko-khimicheskiye svoystva ferritov (Physical and physicochemical properties of ferrites), doklady soveshchaniya. Minsk, Nauka i tekhnika, 1966, 278-283

TOPIC TAGS: ferrite, magnetic loss, magnetic property, q factor

ABSTRACT: The effect of additional thermal treatment on the magnitude of the phase shifts and on the introduced losses in noncoupled ferrite phase inverters was studied. Three different ferrite compositions were used. The specimens were sintered at 1000-1200C for 4 hours and allowed to cool naturally in the furnace to room temperature. The experimental procedure followed was described earlier by K. Kalikstein, N. Cooper, and J. Troy (Proc. IRE, 50, No. 9, 2025, 1962). A schematic of the experimental arrangement of the specimen in the waveguide is presented, and the experimental results are summarized in graphs and tables (see Fig. 1). It was found that the variation of the characteristic parameters of ferrites by additional thermal treatment offers new possibilities for improving the properties of ferrites working at ultrahigh frequencies.

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ACC NR: AT6028991

APPROVED FOR RELEASE: 09/18/2001

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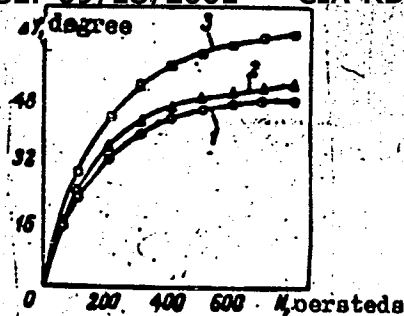


Fig. 1. Dependence of noncoupled phase shift on the thermal treatment (magnesium-chromium ferrite). 1 - before treatment; 2 - after treatment in air with slow cooling; 3 - after repeated annealing in air and subsequent quenching

Orig. art. has: 2 tables and 4 graphs.

SUB CODE: 09, 11/ SUBM DATE: 22Dec65/ ORIG REF: 007/ OTH REF: 005

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Card 2/2

ACC NR: AP7004973

the biased cells are not discussed. It was also found that loss of brightness could be retarded by carefully drying the cells and sealing them from moisture. A well-dried cell actually increased in brightness during the first hour of operation at 1 kHz. It is concluded that build-up of brightness can be achieved not only in certain classes of electroluminescent cells, but in all types of them, by taking measures to reduce to a minimum the effects of rectification. Orig. art. has: 3 figures.

SUB CODE: 20

SUBM DATE: none

ORIG. REF: 003

OTH REF: 001

Card 2/2

ACC NR: AP7004972

SOURCE CODE: UR/0048/66/030/009/1458/1460

AUTHOR: Kolomoyshev, F.I.; Ivaniy, G.M.; Sidorenko, S.M.

ORG: Dnepropetrovsk State University (Dnepropetrovskiy gosudarstvennyy universitet)

TITLE: Electroroentgenoluminescence of a ZnS:Cu phosphor /Report, Fourteenth All-Union Conference on Luminescence (Crystal Phosphors) held at Riga, 16-23 Sept. 1965/

SOURCE: AN SSSR. Izvestiya, Seriya fizicheskaya, v. 30, no. 9, 1966, 1458-1460

TOPIC TAGS: electroluminescence, zinc sulfide, copper, x ray irradiation, luminescence spectrum

ABSTRACT: The authors investigated the luminescence of a ZnS:Cu phosphor under simultaneous excitation by x irradiation and an alternating electric field. The powdered phosphor, mixed with a binder, was deposited on the conducting surface of a glass plate and coated with an aluminum film electrode. Electroluminescence was excited by application of alternating potentials of 30 to 80 V at frequencies from 0.05 to 200 kHz between the conducting glass substrate and the aluminum electrode, and roentgenoluminescence was excited by radiations from a 50 kV x-ray tube incident on the aluminized face of the specimen. The luminescence was observed through the glass substrate with a photomultiplier. The difference $D = B_{er} - (B_e + B_r)$, where B_e is the luminescence brightness under electric field excitation alone, B_r is the brightness under x-ray excitation alone, and B_{er} is the brightness under simultaneous

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ACC NR: AP7004972

electric and x-ray excitation, could be either positive or negative, depending on the strengths of the two excitations and the frequency of the electric field. For fixed x-ray excitation and frequency, D was negative for small exciting voltages V and increased with increasing V ; for fixed x-ray excitation and V , D was small or negative at low frequencies and increased with increasing frequency. The spectral distributions of B_e , B_r , and B_{er} were recorded. The maximum of B_e occurred at a longer wavelength than that of B_r , and D was small or negative at the short wavelengths where $B_e < B_r$, and positive at the longer wavelengths where $B_e > B_r$. It is concluded that D is positive when the electroluminescence brightness exceeds the roentgenoluminescence brightness; that positive values of D are due to enhancement of the electroluminescence brightness by the x-ray excitation; and that rather large positive values of D can be achieved. Electroluminophors with large values of D may find technical application as x-ray screens or in other devices. Orig. art. has: 2 figures.

SUB CODE: 20

SUBM DATE: none

ORIG. REF: 000

Card 2/2

ALSHINBAYEV, M.R.; AMELIN, V.P.; ANDRIANOVA, O.V.; GASTYEV, Zh.;
DEGRAF, G.A.; INKAREEV, A.B.; KOLOMYTSEV, I.V.; KOLTUSHKIN,
I.S.; MALAKHOV, V.P.; MONASTYRSKIY, A.O.; REZNIKOV, B.N.;
SAKHAROV, I.V.; SENNIK, V.K.; SOSNIN, V.A.; SURKO, V.I.;
SURKOV, Ye.P.; SYRLYBAYEV, S.N.; USIKOV, N.V.; UCHAYEV, A.F.;
SHESTOPALOV, Ye.V.; SHERMAN, R., red.; GOROKHOV, L., tekhn.
red.

[Study manual for a machinery operator] Uchebnik-spravochnik
mekhanizatora. Alma-Ata, Kazsel'khozgiz, 1963. 326 p.
(MIRA 16:12)

1. Alma-Ata, Kazakhskiy gosudarstvennyy sel'skokhozyaystven-
nyy institut. Fakul'tet mekhanizatsii. 2. Sotrudniki fakul'-
teta mekhanizatsii Kazakhskogo gosudarstvennogo sel'sko-
khozyaystvennogo instituta (for all except Sherman, Gorokhov).
(Agricultural machinery)

BERNSHTEYN, G.D., kand. tekhn. nauk; KOLOMYTSEV, I.V.; SURKO, V.I.;
KOLOMOR, S.A.

Causes of inadequate oil purification in motor-vehicle engines.
Avt. prom. 31 no.3:15-18 Mr '65. (MIRA 18:7)

1. Kazakhskiy gosudarstvennyy sel'skokhozyaystvennyy institut.

KOLOMYTSEV, L.A.

Quality pickup used in automatic control of rectification
processes. Priborostroenie no.4:12-15 Ap '62. (MIRA 15:4)
(Distillation apparatus) (Automatic control)

SHEYNKMAN, A.K.; PRILEFSKAYA, A.N.; KOLOMOYTSEV, L.P.; KOST, A.N.

Quaternary salts of 4-p-dialkylaminophenyl pyridinium. Vest.
Mosk. un. Ser. 2: Khim. 19 no.6:74-82 N-D '64. (MIRA 18:3)

1. Kafedra organicheskoy khimii Moskovskogo universiteta.



KOLOMOYTSEV, L.R.; DRUZHININ, I.D.

Use of phage-impregnated discs in determining the sensitivity of
bacterial cultures. Zhur.mikrobiol., epid. i immun. 33 no.3:40-41
Mr '62. (MIRA 15:4)

1. Iz kafedry mikrobiologii Donetskogo meditsinskogo instituta.
(BACTERIOPHAGE)

KOLOMOYTSEV, L.R.; KAZARINOVA, N.F.; GEONYA, N.I.; SHEYNKMAN, A.K.

Antibacterial action of some N-substituted pyridine derivatives.
Report No.1. Mikrobiol.zhur. 24 no.3:23-28 '62. (MIRA 15:8)

1. Donetskoye otdeleniye Instituta organicheskoy khimii AN UkrSSR.
(PYRIDINE) (BACTERIA, EFFECT OF DRUGS ON)

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<p>KOLOMOYTSEV, L. R.</p> <p>CO</p> <p>118</p> <p>PROCESSES AND PROPERTIES INDEX</p> <p>Changes in blood cholesterol after antityphoid vaccination. V. A. Grechko, L. R. Kolomoitsey and A. B. Litovskii. <i>Med. expi. (Ukraine)</i> 1958, No. 6, 109-113. Twelve rabbits were vaccinated. This was usually followed at first by a hypocholesterolemia and later by a hypercholesterolemia, i. e., the hypocholesterolemia occurred at the time of the greatest activity of the antigen in the body. However, some variations in the cholesterol response were observed, these presumably depending on the condition of the reticuloendothelial and possibly the vegetative nervous systems. Animals with a weak antibody formation retained the hypocholesterolemia for a longer period. S. A. Corson</p> <p>ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION</p> <p>SECTION 1</p> <p>SECTION 2</p> <p>SECTION 3</p> <p>SECTION 4</p> <p>SECTION 5</p> <p>SECTION 6</p> <p>SECTION 7</p> <p>SECTION 8</p> <p>SECTION 9</p> <p>SECTION 10</p> <p>SECTION 11</p> <p>SECTION 12</p> <p>SECTION 13</p> <p>SECTION 14</p> <p>SECTION 15</p> <p>SECTION 16</p> <p>SECTION 17</p> <p>SECTION 18</p> <p>SECTION 19</p> <p>SECTION 20</p> <p>SECTION 21</p> <p>SECTION 22</p> <p>SECTION 23</p> <p>SECTION 24</p> <p>SECTION 25</p> <p>SECTION 26</p>																									

KOLOMOYTSEV, L.R.; KONDRATENKO, G.P.

Effect of phytoncides of onion and garlic upon toxins and
toxic function of pathogenic staphylococci. Zhur.mikrobiol.
epid.i immun. no.1:45 Ja '54. (MLRA 7:2)

1. Iz kafedry mikrobiologii Stalinskogo meditsinskogo instituta.
(Phytoncides) (Staphylococcus)

USSR/Microbiology, Microbes Pathologic for Man and
Animal

F

Abs Jor : Ref Zhur-Biol., No 13, 1958, 57732

Author : Kolomoysaev L. R., Druzhinin I. D., Zalagina V. S.

Inst : Not given

Title : Antigenic and Immunogenic Properties of the
Phytoncide Antidysentery Vaccine

Orig Pub : Zh. mikrobiol., epidemiol. i immunologii, 1957, 18
No 7, 135-136

Abstract : Results of the study of the antigenic and immu-
nogenic properties of phytoncyde (killed by the
action of volatile fractions of garlic) anti-
dysentery vaccine prepared from Flexner's strain
type W and heated and formalinized vaccine of
the same strain(the method is cited) are repor-
ted. The immunogenesis of the garlic vaccine and

Card 1/2

KOLOMOYTSEV, L.R., dotsent; TUMASHOVA, N.I., kand.med.nauk, assistant;
VINNICHENKO, V.V., assistant; STRONGOVSKAYA, N.V., assistant

Pyoderma in workers of the coal industry in Stalino. Vest.derm.i
ven. 33 no.4:22-26 JI-Ag '59. (MIRA 12:11)

1. Iz kafedry kozhnykh i venericheskikh bolezney (zav. - prof. A.A.
Kroychik) i kafedry mikrobiologii (zav. - dotsent L.R. Kolomoyshev)
Stalinskogo meditsinskogo instituta (dir. - prof. A.M. Ganichkin).
(OCCUPATIONAL DISEASES)
(PYODERMA, statistics)
(COAL MINING)

KOLOMOYTSEV, L. R.; GEONYA, N. I. [Heonia, N. I.]; STRONGOVSKAYA, N. V.
[Stronhova'ka, N. V.]

Method for identifying atypical dysenterial strains. Mikrobiol.
zhur. 24 no.1:60-62 '62. (MIRA 15:7)

(SHIGELLA)

KOLOMOYTSEV, L.R.; GEONYA, N.I. (Heonia, N.H.); SHEYNKMAN, A.K.

Antibacterial effect of some N-substituted pyridine derivatives.
Report No. 2. Mikrobiol. zhur. 25 no. 5:58-67 '63. (MIRA 16:12)

1. Meditsinskiy institut i Donetskii filial Instituta organicheskoy
khimii AN Ukr SSR, Donetsk.

KOLOMOYTSEV, L.R.; GEONYA, N.I.; SHEYKMAN, A.K.

Chemotherapy in diphtheria; annotation. Zhur. mikrobiol.,
epid. i immun. 40 no.4:56 Ap '63. (MIRA 17:5)

KOLOMOYTSEV, L.R.; GEONYA, N.I. [Heonia, N.H.]; STRANGOVSKAYA, N.V.
[Stranhovs'ka, N.V.]; SHEYNKMAN, A.K.

Effect of quaternary salts of 4(n-dialkylaminophenyl)-pyridines
on dysentery bacteriophage. Mikrobiol. zhur. 27 no.2:56-60 '65.
(MIRA 18:5)

1. Donetskii meditsinskiy institut.

VARENKO, Yu.S.; KOLOMOYTSEV, L.R.; REVINA, N.S.

Sanitation of the carriers of pathogenic Staphylococci in the
obstetric and gynecological clinic of Donetsk. Mikrobiol. zhur.
27 no.4:49-51 '65. (MIRA 18:8)

1. Donetskii meditsinskiy institut.

KCIOMYTSEV, V.I.

Analytic properties, with respect to the transmitted momentum,
of the imaginary part of the scattering amplitude in perturbation
theory. Vop. mat. fiz. i teor. funk. no.1:57-64 '64.
(MIRA 18:2)

KOLOMOYTSEV, VALENTIN PAVLOVICH

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756.511
2K8

Sebestoimost' Morskikh Perevozok (Cost of Maritime Transportation)
Moskva, "Morskoy Transport", 1956-
v. Diagr., Maps, Tables.
Lib. Has: Pt. 1

AVS

SMIRNOV, Boris Mikhaylovich; ~~KOLOMOYTSEV, V.P.~~, redaktor; KARYAKIN, G.S.,
redaktor izdatel'stva; ~~TIKHONOVA, I.S.~~, tekhnicheskii redaktor

[Approximation methods of determining construction costs of
seagoing freighters] Priblizhennyye metody opredeleniya stroitel'noi
stoimosti morskikh gruzovykh sudov. Moskva, Izd-vo "Morskoi transport",
1956. 69 p. (MLRA 10:3)
(Shipbuilding—Costs)

KOLOMOYTSKY, V. kandidat tekhnicheskikh nauk.

Improving economic indexes on the ore and coal shipping line Poti-Zhdanov. Mor.flot 16 no.4:6-9 A '56. (MLRA 9:8)

1. Leningradskiy institut inzhenerov vodnogo transporta.
(Black Sea--Shipping--Costs)
(Azov Sea--Shipping--Costs)

PROTASOV, Vasiliiy Semenovich, SIDOROV, Pavel Petrovich, KOLOMOYTSEV, V.P.
retsenzent, GUREVICH, Sh.M., retsenzent, ARSEN'IEV, S.P., red.;
IVANOV, L.A., red.; LOBANOV, Ye.M. red.izd-va.; YERMAKOVA, T.T..
tekhn.red.

[Economics of river transportation] Ekonomika rechnogo transporta.
Moskva, Izd-vo "Rechnoi transport," 1958. 321 p. (MIRA 11:9)
(Inland water transportation)

KOLONOTTSEV, Y.P., kand.tekhn.nauk

Economic requirements for storage areas of seagoing cargo ships.
Sudostroenie 24 no.8:8-11 Ag '58. (MIRA 11:10)
(Ships--Cargo)

KOLOMOYTSEV, Valentin Pavlovich; VUL'FSON, M.S., red.; KSENOFONTOVA,
Ye.F., red.izd-va; LAVRENOVA, N.B., tekhn.red.

[Cost of sea transportation] Sebestoimost' morskikh perevozok.
Moskva, Izd-vo "Morskoi transport," 1960. 371 p. (MIRA 14:4)

(Merchant marine---Cost of operation)

SMIRNOV, Boris Mikhaylovich [deceased]; KOLOMOYTSEV, V.P., kand. tekhn. nauk, retsenzent; GORDON, L.A., kand. tekhn. nauk, retsenzent; IRKHIN, A.P., nauchnyy red.; KAZAROV, Yu.S., red.; TSAL, R.K., tekhn. red.

[Economic analysis in the design of seagoing vessels] Ekonomicheskiy analiz pri proektirovani morskikh sudov. Leningrad, Gos. soiuзное izd-vo sudostroitel. promyshl., 1960. 375 p.
(MIRA 14:7)

(Naval architecture) (Shipping—Accounting)

VISHNEPOL'SKIY, S.A., kand. ekon. nauk; BAYEV, S.M., inzh. putey soob-
shcheniya; BONDARENKO, V.S.; RODIN, Ye.D.; CHUVLEV, V.P.;
TURETSKIY, L.S.; SMIRNOV, G.S.; SHAPIROVSKIY, D.B.; OBERMEYSTER,
A.M.; SINITSIN, M.T.; KOGAN, N.D.; PETRUCHIK, V.A.; GRUNIN, A.G.;
KOLESNIKOV, V.G.; MARTIROSOV, A.Ye.; KROTKIY, I.B. [deceased];
ZENEVICH, G.B.; MEZENTSEV, G.A.; KOLOMOYTSEV, V.P., kand. tekhn. nauk;
ZAMAKHOVSKAYA, A.G., kand. tekhn. nauk; MAKAL'SKIY, I.I., kand.
ekon. nauk; MITROFANOV, V.F., kand. ekon. nauk; CHILIKIN, Ya.A.;
BAKAYEV, V.G., doktor tekhn. nauk, red. Prinimali uchastiye:
DZHAVAD, Yu.Kh., red.; GUBERMAN, R.L., kand. ekon. nauk, red.;
RYABCHIKOV, P.A., red.; YAVLENSKIY, S.D., red.; BAYRASHEVSKIY,
A.M., kand. tekhn. nauk, red.; POLYUSHKIN, V.A., red.; BALANDIN,
G.I., red.; ZOTOV, D.K., red.; RYZHOV, V.Ye., red.; BOL'SHAKOV, A.N.,
red.; VUL'FSON, M.S., kand. ekon. nauk, red.; IMITRIYEV, V.I., kand.
ekon. nauk, red.; ALEKSANDROV, L.A., red.; LAVRENOVA, N.B., tekhn.
red.

[Transportation in the U.S.S.R.; marine transportation] Transport
SSSR; morskoi transport. Moskva, Izd-vo "Morskoi transport,"
1961. 759 p. (MIRA 15:2)

(Merchant marine)

KOLOMOYTSEV, V.P., kand.tekhn.nauk, dotsent; ATLAS, B.A., kand.
ekonomicheskikh nauk

Improving the indices of the harbor operations plan. Trudy
LIVT no.16:36-43 '61. (MIRA 14:9)
(Harbors) (Cargo handling)

MAKAROVA, Ye.V., assistant; KOLOMOYTSEVA, I.P., assistant; ROTENBERG, V.S.,
student VI kursa

Modern concepts of the blood supply in the spinal cord. Trudy 1-go
MMI 38:27-37 '65. (MIRA 18:10)

SHTUL'MAN, D.R., assistant; KOLOMOYTSEVA, I.P., assistant

Clinical aspects of discogenic cervical myelopathy. Trudy 1-go MMI
38:67-116 '65. (MIRA 18:10)

KOLCHMOYTSEVA, I.P., assistant; MAKAROVA, Ye.V., assistant

Spinal insult in osteochondrosis of the spine. Trudy 1-go MMI 38:
176-196 '65. (MIRA 18:10)

PARAMONOV, L.V.; KOLOMOYTSEVA, I.P., assistant

Neurological complications of craniovertebral anomalies. Trudy 1-go
MMI 38:363-376 '65. (MIRA 18:10)